

Application No.: 10/606,964

Docket No.: 22040-00016-US1

AMENDMENTS TO THE CLAIMS

This listing of claims replaces all previous versions and listings of claims in this application:

Claims 1-4 (Canceled).

5. (Currently amended) An amplifier circuit for ~~AM broadcasting for amplifying an inputted AM broadcast signal suitable for amplifying an AM broadcast signal, the circuit comprising:~~

~~by FETs and outputting it, characterized in that said FETs include~~

a first P-channel MOSFET ~~for amplifying said~~ which amplifies the inputted AM broadcast signal; and

a second P-channel MOSFET ~~for AGC controlling the~~ which controls a gain of a signal outputted from said first P-channel MOSFET;

wherein said first P-channel MOSFET and said second P-channel MOSFET are cascode-coupled in a manner which ensures that a flicker noise level of the amplifier circuit is intermediate to respective flicker noise levels of a JFET-configured circuit and an N-MOS configured circuit.

6. (Currently amended) An amplifier circuit for ~~AM broadcasting, characterized by suitable for amplifying an AM broadcast signal, the circuit comprising:~~

a first P-channel MOSFET ~~for amplifying an inputted~~ which amplifies the AM broadcast signal;

a second P-channel MOSFET ~~for AGC controlling the~~ connected to the first P-channel MOSFET, said second P-channel MOSFET controlling a gain of a signal outputted from said first P-channel MOSFET; and

Application No.: 10/606,964

Docket No.: 22040-00016-US1

a tuning circuit ~~connected to a drain of the second P-channel MOSFET, said tuning circuit for high-frequency amplifying the signal outputted~~ filtering and providing an output from said second P-channel MOSFET and outputting it;

wherein said first P-channel MOSFET and said second P-channel MOSFET are configured in a cascode-coupled arrangement which reduces a flicker noise of the amplifier circuit below a flicker noise level of an equivalent N-MOS configured circuit.

7. (Currently amended) An amplifier circuit ~~for AM broadcasting, characterized by suitable for amplifying an AM broadcast signal, the circuit comprising:~~

a capacitor ~~for cutting~~ which blocks a DC component of an inputted the AM broadcast signal;

a first P-channel MOSFET ~~for amplifying~~ connected to an output of the capacitor, said first P-channel MOSFET amplifying the AM broadcast signal outputted from said capacitor;

a resistor ~~for giving said~~ which biases the first P-channel MOSFET an appropriate bias;

a second P-channel MOSFET ~~for AGC controlling the~~ connected to the first P-channel MOSFET so as to control a gain of a signal outputted from said first P-channel MOSFET; and

a tuning circuit ~~for high-frequency amplifying which filters and outputs the signal outputted from said second P-channel MOSFET and outputting it;~~

wherein said first P-channel MOSFET and said second P-channel MOSFET are configured in a cascode-coupled arrangement which reduces a flicker noise of the amplifier circuit below a flicker noise level of an equivalent N-MOS configured circuit.

8. (Currently amended) The amplifier circuit ~~for AM broadcasting according to of claim 5, characterized in that the~~ wherein a channel area of said P-channel MOSFET is greater than a predetermined value selected to reduce a flicker noise of the amplifier circuit.

Application No.: 10/606,964

Docket No.: 22040-00016-US1

9. (Currently amended) The amplifier circuit ~~for AM broadcasting according to of~~ claim 6, ~~characterized in that the~~ wherein a channel area of said P-channel MOSFET is greater than a predetermined value selected to reduce a flicker noise of the amplifier circuit.

10. (Currently amended) The amplifier circuit ~~for AM broadcasting according to of~~ claim 7, ~~characterized in that the~~ wherein a channel area of said P-channel MOSFET is greater than a predetermined value selected to reduce a flicker noise of the amplifier circuit.

11. (New) An amplifier circuit suitable for amplifying an AM broadcast signal, the circuit comprising:

FET means for amplifying the AM broadcast signal and reducing a flicker noise level in the amplifier below an N-MOS transistor equivalent flicker noise; and

a tuning circuit operatively connected between the FET means and an output node of the amplifier circuit.

12. (New) The amplifier circuit of claim 11, wherein said FET means comprises two cascode-coupled P-MOS transistors.

13. (New) The amplifier circuit of claim 11, wherein said FET means comprises two cascode-coupled P-MOS transistors which receive, respectively, the AM broadcast signal and an AGC voltage.

14. (New) The amplifier circuit of claim 11, further comprising a DC-blocking capacitor,

wherein the AM broadcast signal is coupled through the DC-blocking capacitor to the FET means at a gate of a P-MOS transistor contained therein.